

P. PARIS JR.

Page 1 of 7
#10
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NOV 27 2000

1632

TECH CENTER 1600/2900

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/518,931

DATE: 11/07/2000
TIME: 11:36:26

Input Set : A:\454p1 SL Jul2000 PA
Output Set: N:\CRF3\11072000\I518931.raw

3 <110> APPLICANT: Gentz, Reiner
5 <120> TITLE OF INVENTION: Tumor Necrosis Factor Receptors 6 Alpha and 6 Beta
7 <130> FILE REFERENCE: PF454P1
9 <140> CURRENT APPLICATION NUMBER: 09/518,931
10 <141> CURRENT FILING DATE: 2000-03-03
12 <150> PRIOR APPLICATION NUMBER: 09/006,352
13 <151> PRIOR FILING DATE: 1998-01-13
15 <150> PRIOR APPLICATION NUMBER: 60/121,774
16 <151> PRIOR FILING DATE: 1999-03-04
18 <150> PRIOR APPLICATION NUMBER: 60/124,092
19 <151> PRIOR FILING DATE: 1999-03-12
21 <150> PRIOR APPLICATION NUMBER: 60/131,279
22 <151> PRIOR FILING DATE: 1999-04-27
24 <150> PRIOR APPLICATION NUMBER: 60/131,964
25 <151> PRIOR FILING DATE: 1999-04-30
27 <150> PRIOR APPLICATION NUMBER: 60/146,371
28 <151> PRIOR FILING DATE: 1999-08-02
30 <150> PRIOR APPLICATION NUMBER: 60/168,235
31 <151> PRIOR FILING DATE: 1999-12-01
33 <160> NUMBER OF SEQ ID NOS: 27
35 <170> SOFTWARE: PatentIn Ver. 2.1
37 <210> SEQ ID NO: 1
38 <211> LENGTH: 1077
39 <212> TYPE: DNA
40 <213> ORGANISM: Homo sapiens
42 <220> FEATURE:
43 <221> NAME/KEY: CDS
44 <222> LOCATION: (25)..(924)
46 <400> SEQUENCE: 1
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49 1 5
51 tcc ctg ctg tgc ctg gtg gcg ctg cct gcc ctg ctg ccg gtg ccg 99
52 Ser Leu Leu Cys Leu Val Leu Ala Leu Pro Ala Leu Leu Pro Val Pro
53 10 15 20 25
55 gct gta cgc gga gty gca gaa aca ccc acc tac ccc tgg cgg gac gca 147
56 Ala Val Arg Gly Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala
57 30 35 40
59 gag aca ggg gag cgg ctg gtg tgc gcc cag tgc ccc cca ggc acc ttt 195
60 Glu Thr Gly Glu Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe
61 45 50 55
63 gty cag cgg ccg tgc cyc cga gac agc ccc acg acg tgc ggc ccg tgt 243
64 Val Gln Arg Pro Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys
65 60 65 70
67 cca ccg cgc cac Lac acg cag ttc tgg aac tac ctg gag cgc tgc cgc 291
68 Pro Pro Arg His Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg
69 75 80 85

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See p. 5

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Input Set : A:\454pl SL Jul2000 PA
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71 tac tgc aac gtc ctc tgc ggg gag cgt gag gag gca cgg gct tyc	339
72 Tyr Cys Asn Val Leu Cys Gly Glu Arg Glu Glu Ala Arg Ala Cys	
73 90 95 100 105	
75 cac gcc acc cac aac cgt gcc tgc cgc acc ggc ttc ttc gcy	387
76 His Ala Thr His Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala	
77 110 115 120	
79 cac gct ggt ttc tgc ttg gag cac gca tcg tgt cca cct ggt gcc ggc	435
80 His Ala Gly Phe Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly	
81 125 130 135	
83 gtg att gcc ccg ggc acc ccc agc cag aac acg cag tyc cag ccg tgc	483
84 Val Ile Ala Pro Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys	
85 140 145 150	
87 ccc cca ggc acc ttc tca gcc agc tcc agc tca gag cag tgc cag	531
88 Pro Pro Gly Thr Phe Ser Ala Ser Ser Ser Ser Glu Gln Cys Gln	
89 155 160 165	
91 ccc cac cgc aac tgc acg gcc ctg ggc ctg qcc ctc aat gtg cca ggc	579
92 Pro His Arg Asn Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly	
93 170 175 180 185	
95 tct tcc tcc cat gac acc ctg tgc acc agc tgc act ggc ttc ccc ctc	627
96 Ser Ser Ser His Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu	
97 190 195 200	
99 agc acc agg gta cca gga gct gag gag tgt gag cgt gcc gtc atc gac	675
100 Ser Thr Arg Val Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp	
101 205 210 215	
103 ttt gtg gct ttc cag gac atc tcc atc aag agg ctg cag ccg ctg ctg	723
104 Phe Val Ala Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu	
105 220 225 230	
107 cag gcc ctc gag gcc ccg gag ggc tgg ggt ccg aca cca agg gcg ggc	771
108 Gln Ala Leu Glu Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly	
109 235 240 245	
111 cgc gcg gcc ttg cag ctg aag ctg cgt ccg ccg ctc acg gag ctc ctg	819
112 Arg Ala Ala Leu Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu	
113 250 255 260 265	
115 ggg gcg cag gac ggg gcg ctg ctg gtg ccg ctg ctg cag gcg ctg cgc	867
116 Gly Ala Gln Asp Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg	
117 270 275 280	
119 gtg gcc agg atg ccc ggg ctg gag ccg agc gtc cgt gag cgc ttc ctc	915
120 Val Ala Arg Met Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu	
121 285 290 295	
123 cct gtg cac tgatccctggc cccctttat ttatctaca tccttggcac	964
124 Pro Val His	
125 300	
127 cccacttgca ctgaaaaggagg cttttttta aatagaagaa atgagggttc ttaaagctta	1024
129 tttttataaa gctttttcat aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa	1077
132 <210> SEQ ID NO: 2	
133 <211> LENGTH: 300	
134 <212> TYPE: PRT	
135 <213> ORGANISM: Homo sapiens	
137 <400> SEQUENCE: 2	

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Input Set : A:\454pl SL Jul2000 PA
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138 Met Arg Ala Leu Glu Gly Pro Gly Leu Ser Leu Leu Cys Leu Val Leu
 139 1 5 10 15
 141 Ala Leu Pro Ala Leu Leu Pro Val Pro Ala Val Arg Gly Val Ala Glu
 142 20 25 30
 144 Thr Pro Thr Pro Trp Arg Asp Ala Glu Thr Gly Glu Arg Leu Val
 145 35 40 45
 147 Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro Cys Arg Arg
 148 50 55 60
 150 Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His Tyr Thr Gln
 151 65 70 75 80
 153 Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val Leu Cys Gly
 154 85 90 95
 156 Glu Arg Glu Glu Ala Arg Ala Cys His Ala Thr His Asn Arg Ala
 157 100 105 110
 159 Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe Cys Leu Glu
 160 115 120 125
 162 His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro Gly Thr Pro
 163 130 135 140
 165 Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly Thr Phe Ser Ala
 166 145 150 155 160
 168 Ser Ser Ser Ser Gln Cys Gln Pro His Arg Asn Cys Thr Ala
 169 165 170 175
 171 Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser His Asp Thr Leu
 172 180 185 190
 174 Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg Val Pro Gly Ala
 175 195 200 205
 177 Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala Phe Gln Asp Ile
 178 210 215 220
 180 Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu Glu Ala Pro Glu
 181 225 230 235 240
 183 Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala Leu Gln Leu Lys
 184 245 250 255
 186 Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln Asp Gly Ala Leu
 187 260 265 270
 189 Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg Met Pro Gly Leu
 190 275 280 285
 192 Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
 193 290 295 300
 197 <210> SEQ ID NO: 3
 198 <211> LENGTH: 1667
 199 <212> TYPE: DNA
 200 <213> ORGANISM: Homo sapiens
 202 <220> FEATURE:
 203 <221> NAME/KEY: CDS
 204 <222> LOCATION: (73)..(582)
 206 <400> SEQUENCE: 3
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 209 ccagcaagga cc atg agg gcg ctg gag ggg cca ggc ctg tcg ctg tgc 111
 210 Met Arg Ala Leu Glu Gly Pro Gly Leu Ser Leu Leu Cys

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211	1	5	10														
213	ctg	gtg	ttg	gct	ctg	cct	gcc	ctg	ctg	ccg	gtg	ccg	gct	gta	cgc	gga	159
214	Leu	Val	Leu	Ala	Leu	Pro	Ala	Leu	Leu	Pro	Val	Pro	Ala	Val	Arg	Gly	
215	15	20	25														
217	gtg	gca	gaa	aca	ccc	acc	tac	ccc	tgg	ccg	gac	gca	gag	aca	ggg	gag	207
218	Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu	
219	30	35	40	45													
221	ccg	ctg	gtg	tgc	gcc	cag	tgc	ccc	cca	ggc	acc	ttt	gtg	caq	ccg	ccg	255
222	Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Glu	Arg	Pro	
223	50	55	60														
225	tgc	cgc	cga	gac	acc	ccc	acg	tgt	ggc	ccg	tgt	cca	ccg	cgc	cac	303	
226	Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His	
227	65	70	75														
229	tac	acg	cag	ttc	tgg	aac	tac	ctg	gag	ccg	tgc	ccg	tac	tgc	aac	gtc	351
230	Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val	
231	80	85	90														
233	ctc	tgc	ggg	gag	cgt	gag	gag	gca	ccg	gct	tgc	cac	gcc	acc	cac	399	
234	Leu	Cys	Gly	Glu	Arg	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His		
235	95	100	105														
237	aac	cgt	qcc	tgc	cgc	acc	ggc	ttc	ttc	gct	ccg	cac	gct	ggt	ttc	447	
238	Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe	
239	110	115	120	125													
241	tgc	ttg	gag	cac	gca	tgc	tgt	cca	cct	ggt	gcc	ggc	gtg	att	gcc	ccg	495
242	Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro	
243	130	135	140														
245	ggt	gag	agc	tgg	ggc	agg	ggg	ggc	ccc	agg	agt	ggt	ggc	ccg	agg	543	
246	Gly	Glu	Ser	Trp	Ala	Arg	Gly	Gly	Ala	Pro	Arg	Ser	Gly	Gly	Arg	Arg	
247	145	150	155														
249	tgt	ggc	agg	ggt	cag	gtt	gct	ggc	ccc	agg	ccg	ttt	gtg	ccct	tgatcttag	592	
250	Cys	Gly	Arg	Gly	Gln	Val	Ala	Gly	Pro	Ser	Leu	Ala	Pro				
251	160	165	170														
253	caccagtcc	cctgaccctg	ttcttccttc	cttgctgcag	gcaccccccag	ccagaacacg	652										
255	cagtgc	cgc	ctggccccc	aggcaecttc	tcageccagca	gtcccaagtc	agagcagtgc	712									
257	cagccccacc	gcaactgcac	ggccctggc	ctggccctca	atgtgc	ccagg	ctcttcctcc	772									
259	catgacaccc	tgtgcaccc	ctgcactgc	ttcccccctca	gcaccagggt	accagggtgag	832										
261	cccgaggcc	gagggggcag	cacactgcag	gcacggcc	cttgcgtcc	cactcctgc	892										
263	cctgcacgt	catcttagct	gaggcgtcc	agctggctc	gggaaggggc	cacagtggat	952										
265	ttgagggg	tc	gggttccct	ccactagatc	ccaccaat	ctgcctctc	agggggtgg	1012									
267	gagaatttg	atcttg	ggccatggca	gggcacagcc	tcccttggag	agctctggga	aagtggggcag	1072									
269	caatcttca	actgc	ccgg	gggaaagggtgg	ttggcttcctc	tgacacgggg	aaaccggaggc	1132									
271	ctgatgtta	ctctccctaa	tgc	tgcgtggag	gaagggtggct	cccttcctcg	acatggggaa	1192									
273	accggggcc	aatgttaacc	actgtt	gaga	agtcacagg	ggaaatgtgacc	cccttaacat	1252									
275	caagtca	gt	ccgg	tccat	tcgcagg	ttccat	ccaggagcc	1312									
277	caaggcc	cttgc	gggg	cccttctt	gcaccc	ttcgatgtgc	ccgtccctgc	1372									
279	cccttgc	ttgc	ccat	tcgtccat	aaatgttcc	cccttcctcc	atgtccat	1432									
281	gttgc	actgc	ccat	ccat	gcacaggat	ttcttc	tcgtccat	tgcaaa	1492								
283	ccgatgtgg	ccca	aaagg	ttgttcc	gcacccccc	ccatgtgtgt	ttgggtaaat	1552									
285	gatcggaccc	ctgc	cccttccccc	acc	ccactgc	aggatgtgt	gatgtgtgt	gtccgtcat	1612								
287	cgactttt	gtt	ccagg	atctccat	caaggagg	ggctgtgt	ggccc	1667									

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Input Set : A:\454pl SL Jul2000 PA
Output Set: N:\CRF3\11072000\I518931.raw

290 <210> SEQ ID NO: 4
291 <211> LENGTH: 170
292 <212> TYPE: PRT
293 <213> ORGANISM: Homo sapiens
295 <400> SEQUENCE: 4
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299 Ala Leu Pro Ala Leu Leu Pro Val Pro Ala Val Arg Gly Val Ala Glu
300 20 25 30
302 Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu Arg Leu Val
303 35 40 45
305 Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro Cys Arg Arg
306 50 55 60
308 Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His Tyr Thr Gln
309 65 70 75 80
311 Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val Leu Cys Gly
312 85 90 95
314 Glu Arg Glu Glu Ala Arg Ala Cys His Ala Thr His Asn Arg Ala
315 100 105 110
317 Cys Arg Cys Arg Thr Gly Phe Ala His Ala Gly Phe Cys Leu Glu
318 115 120 125
320 His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro Gly Glu Ser
321 130 135 140
323 Trp Ala Arg Gly Gly Ala Pro Arg Ser Gly Gly Arg Arg Cys Gly Arg
324 145 150 155 160
326 Gly Gln Val Ala Gly Pro Ser Leu Ala Pro
327 165 170
331 <210> SEQ ID NO: 5
332 <211> LENGTH: 455
333 <212> TYPE: PRT
334 <213> ORGANISM: Homo sapiens
336 <400> SEQUENCE: 5
337 Met Gly Leu Ser Thr Val Pro Asp Leu Leu Leu Pro Leu Val Leu Leu
338 1 5 10 15
340 Glu Leu Leu Val Gly Ile Tyr Pro Ser Gly Val Ile Gly Leu Val Pro
341 20 25 30
343 His Leu Gly Asp Arg Glu Lys Arg Asp Ser Val Cys Pro Gln Gly Lys
344 35 40 45
346 Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys
347 50 55 60
349 Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp
350 65 70 75 80
352 Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His Leu
353 85 90 95
355 Arg His Cys Leu Ser Cys Ser Lys Cys Arg Lys Glu Met Gly Gln Val
356 100 105 110
358 Glu Ile Ser Ser Cys Thr Val Asp Arg Asp Thr Val Cys Gly Cys Arg
359 115 120 125
361 Lys Asn Gln Tyr Arg His Tyr Trp Ser Glu Asn Leu Phe Gln Cys Phe

✓ F.Y.

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/518,931

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Input Set : A:\454p1 SL Jul2000 PA
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L:1418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1421 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1425 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1455 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:1456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:1457 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:1458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18